Indiana Crop & Weather Report

United States Dept of Agriculture

Indiana Agricultural Statistics Service
1435 Win Hentschel Blvd. Suite B105
West Lafayette, IN 47906-4145
(765) 494-8371

Released: August 25, 2003
Vol. 53, No. 34

CROP REPORT FOR WEEK ENDING AUGUST 24

AGRICULTURAL SUMMARY

Another week of hot temperatures and lack of precipitation placed more stress on major crops around the state, according to the Indiana Agricultural Statistics Service. Reporters in most regions indicate corn and soybeans need rain to help grain fill in corn and pod fill in soybean plants. Both corn and soybean condition declined last week. Many farmers continued scouting fields for insects, especially aphids in soybean fields. Spraying for insects took place in some fields. Farmers had another excellent week for cutting and baling hay. Weeds are showing up in some fields.

FIELD CROPS REPORT

There were 6.8 **days suitable for fieldwork**. Seventy percent of the corn acreage has reached the **dough** stage compared with 72 percent last year and 89 percent for the 5-year average. Twenty-one percent of the corn acreage has reached the **dent** stage compared with 25 percent last year and 50 percent for the average. By area, 17 percent of the corn acreage is in the dent stage in the north, 25 percent in the central region and 23 percent in the south. One percent of the corn acreage is **mature** (safe from frost) compared with 1 percent a year ago and 5 percent for the 5-year average. Corn **condition** declined from last week and is rated 56 percent good to excellent compared with 29 percent last year at this time.

Eighty-two percent of the soybean acreage is **setting pods** compared with 83 percent last year and 93 percent for the average. One percent of the soybean acreage is **shedding leaves** compared with 4 percent last year and 6 percent for the average. Soybean **condition** also declined and is rated 57 percent good to excellent compared with 38 percent last year at this time.

Major activities during the week were mowing and baling hay, spraying for weeds and insects, cleaning up and repairing equipment, moving grain to market, mowing roadsides, cleaning out grain bins and taking care of livestock.

LIVESTOCK, PASTURE AND RANGE REPORT

Pasture condition is rated 6 percent excellent, 61 percent good, 23 percent fair, 7 percent poor and 3 percent very poor. Third cutting of **alfalfa** hay is 51 percent complete compared with 52 percent last year and 76 percent for average. **Tobacco** harvest is 7 percent complete compared with 9 percent last year and 19 percent for the average. Livestock are in mostly good condition, but were under some stress.

CROP PROGRESS TABLE

Crop	This Week	Last Week	Last Year	5-Year Avg
	Percent			
Corn In Dough	70	45	72	89
Corn In Dent	21	6	25	50
Corn Mature	1	NA	1	5
Soybeans Setting Pods	82	63	83	93
Soybeans Shedding Lvs	1	NA	4	6
Alfalfa Third Cutting	51	27	52	76
Tobacco Harvested	7	NA	9	19

CROP CONDITION TABLE

Crop	Very Poor	Poor	Fair	Good	Excel-lent
			Percent		
Corn	5	11	28	43	13
Soybean	5	9	29	47	10
Pasture	3	7	23	61	6

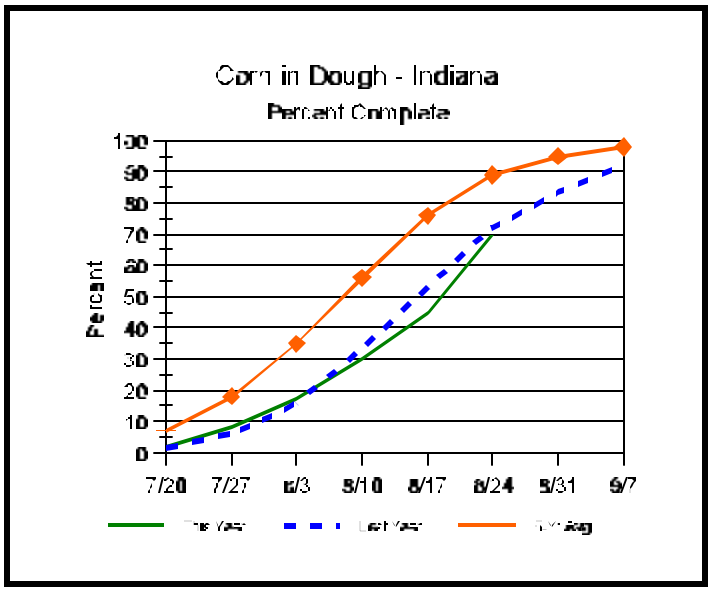
SOIL MOISTURE & DAYS SUITABLE FOR FIELDWORK TABLE

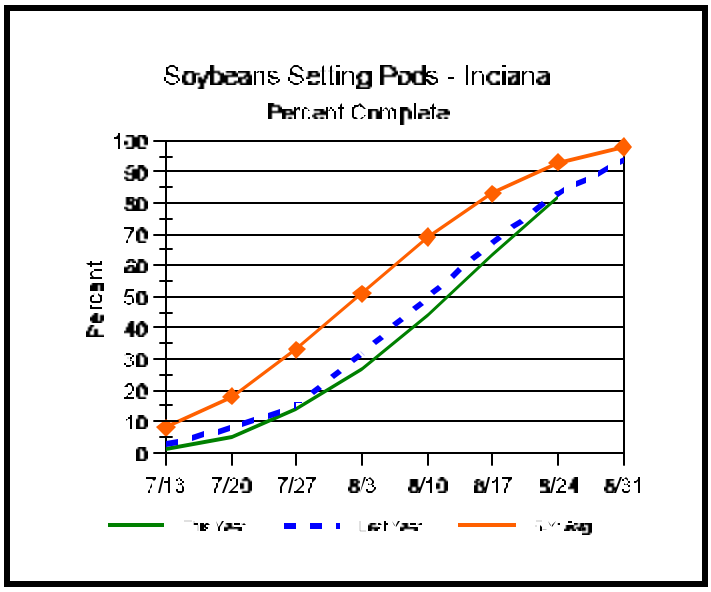
	This Week	Last Week	Last Year
		Percent	
Topsoil			
Very Short	8	1	29
Short	31	12	38
Adequate	59	78	31
Surplus	2	9	2
Subsoil			
Very Short	6	3	32
Short	21	8	40
Adequate	70	82	27
Surplus	3	7	1
Days Suitable	6.8	6.1	5.6

CONTACT INFORMATION

--Greg Preston, State Statistician
--Bud Bever, Agricultural Statistician
E-Mail Address: nass-in@nass.usda.gov
http://www.nass.usda.gov/in/index.htm

Crop Progress





Other Agricultural Comments And News

Stalk Health Issues in Stressed Corn

Even though the current USDA corn production estimate for Indiana is remarkably optimistic (<http://www.nass.usda.gov/in/pressrel/de081203.txt>), many growers recognize that individual fields or areas within fields have been struggling against multiple stresses throughout the season. Problems resulting from stress in 2003 include root damage and lower leaf death due to soggy soils, leaf canopy yellowing and death due to nitrogen deficiency resulting from soggy soils, stunted root and canopy development due to excessively dry soil moisture conditions, limited crop canopy photosynthesis due to frequent cloudy or hazy days, and root damage from corn rootworm larva feeding.

Fields or areas within fields that have suffered one or more of these stresses will be stressed further during the grain filling period as the photosynthetic factory tries to keep up with the physiological demands of the developing ears. In some severe situations, plants that are unable to keep up with the demand, due to less than healthy root systems or crop canopies, will resort to cannibalizing stored carbohydrate reserves in the lower stalk tissue and remobilizing those reserves to the developing ears.

Such remobilization of stored carbohydrates from lower stalk tissue causes an overall deterioration of lower stalk integrity and strength. More importantly, as carbohydrate concentrations decrease in the lower stalk or root tissues, their resistance to the soil complex of root- and stalk-rotting organisms also decreases.

Beginning in late August or early September, growers should begin regular inspections of suspect fields that have endured multiple stresses this year and monitor the general health of the lower stalk and roots of plants. Stalk health in such fields further stressed by excessively dry soil conditions during grain filling will be particularly suspect.

The simplest diagnostic technique is to push stalks away from you as you walk down rows of corn and see whether they collapse and break or “spring back” to a vertical position. Easily broken plants signal either significant cannibalization of lower stalk tissue or development of stalk rot. In either case, such fields are prime candidates for stalk lodging concerns prior to harvest.

Pinching lower stalk internodes between your fingers can identify lesser degrees of stalk health concerns. If the internodes “give way” or collapse easily, that is also a signal that stalk health has been compromised. Split such stalks in half and inspect the interior for obvious disease symptoms.

(Continued on Page 4)

Weather Information Table

Week ending Sunday August 24, 2003

Station	Past Week Weather Summary Data							Accumulation April 1, 2003 thru August 24, 2003				
	Air Temperature				Precip.		Avg 4 in Soil Temp	Precipitation			GDD Base 50°F	
	Hi	Lo	Avg	DFN	Total	Days		Total	DFN	Days	Total	DFN
Northwest (1)												
Chalmers_5W	94	55	73	+3	0.02	1	76	27.41	+9.09	56	2257	-159
Valparaiso_AP_I	95	53	72	+3	0.00	0		20.34	+1.41	57	2087	-117
Wanatah	94	52	71	+2	0.00	0	82	20.93	+2.46	59	1958	-151
Wheatfield	94	54	72	+3	0.00	0		30.13	+12.12	55	2150	-11
Winamac	92	57	72	+3	0.00	0	76	23.91	+5.64	56	2119	-109
North Central(2)												
Plymouth	94	55	72	+2	0.23	1		19.43	+0.91	57	2037	-297
South_Bend	97	56	74	+4	0.05	1		17.86	+0.06	52	2132	-61
Young_America	90	56	72	+2	0.00	0		25.39	+7.93	55	2246	-41
Northeast (3)												
Columbia_City	92	55	71	+2	0.33	1	77	21.03	+3.39	64	2078	-12
Fort_Wayne	92	54	71	+0	0.38	1		24.54	+8.04	53	2126	-164
West Central (4)												
Greencastle	90	52	70	-4	0.00	0		21.94	+1.24	56	2152	-424
Perrysville	94	52	73	+3	0.00	0	76	18.78	-0.92	50	2410	+4
Spencer_Ag	92	57	74	+3	0.06	1		21.95	+0.74	67	2397	-32
Terre_Haute_AFB	92	54	74	+2	0.00	0		16.50	-3.14	47	2531	-33
W_Lafayette_6NW	93	54	73	+4	0.00	0	82	21.33	+3.05	60	2311	+31
Central (5)												
Eagle_Creek_AP	89	59	74	+2	0.00	0		21.03	+2.48	50	2443	-100
Greenfield	90	56	72	+0	0.15	1		22.85	+2.42	60	2293	-143
Indianapolis_AP	89	60	75	+3	0.00	0		22.14	+3.59	55	2494	-49
Indianapolis_SE	90	55	74	+2	0.00	0		21.42	+2.19	56	2323	-204
Tipton_Ag	90	53	71	+2	0.00	0	80	25.87	+7.29	57	2112	-103
East Central (6)												
Farmland	90	53	70	+2	0.00	0	77	23.18	+5.14	54	2204	+42
New_Castle	85	53	69	-3	0.00	0		20.63	+0.93	50	1913	-301
Southwest (7)												
Evansville	95	61	79	+4	0.00	0		20.44	+1.69	54	2839	-116
Freelandville	91	60	75	+3	0.09	1		21.91	+2.36	51	2627	-22
Shoals	93	59	76	+4	0.00	0		23.88	+2.66	54	2575	+14
Stendal	94	60	78	+4	0.00	0		20.48	-0.51	44	2719	-64
Vincennes_5NE	94	60	77	+4	0.29	2		23.84	+4.29	71	2681	+32
South Central(8)												
Leavenworth	92	61	77	+5	0.49	2		23.25	+1.50	72	2607	+57
Oolitic	90	57	74	+2	0.00	0	79	24.75	+4.29	61	2451	+2
Tell_City	95	63	80	+6	0.00	0		21.03	-0.41	47	2983	+157
Southeast (9)												
Brookville	92	57	74	+4	0.00	0		21.40	+1.55	57	2473	+149
Milan_5NE	90	57	73	+3	0.47	3		26.49	+6.64	85	2388	+64
Scottsburg	92	57	75	+2	0.46	1		22.08	+1.94	62	2473	-161

DFN = Departure From Normal (Using 1961-90 Normals Period).
GDD = Growing Degree Days.
Precipitation (Rainfall or melted snow/ice) in inches.
Precipitation Days = Days with precip of .01 inch or more.
Air Temperatures in Degrees Fahrenheit.

The above weather information is provided by AWIS, Inc.
For detailed ag weather forecasts and data visit the AWIS home page at
www.awis.com or call toll free at 1-888-798-9955.

Root health can be monitored first by attempting to pull plants out of the soil with your hands. If this can be done easily, chances are that root health has been compromised and the field is at risk of root lodging if severe windstorms occur prior to harvest. If plants do not pull easily, then dig a few plants, wash the soil away from the root system, and inspect the roots for discoloration (red, purple, brown) that could indicate early root rot development.

If fields are identified that are clearly high risk for root or stalk lodging prior to harvest, then schedule these fields for earlier than anticipated harvest to minimize the risk and consequences of severe lodging relative to potential mechanical harvest losses.

Related References:

Shaner, G. And D. Scott. 1998. **Stalk Rots of Corn** (BP-59). Purdue Univ. Coop. Extension Service, W. Lafayette, IN. Available online at <http://www.agcom purdue.edu/AgCom/Pubs/BP/BP-59.pm65.pdf>. [URL verified 8/13/03].

Malvick, D. 2000. **Corn Stalk Rots** (RPD-200). Univ. of Illinois Coop. Extension Service, Urbana, IL. Available online at<http://web.aces.uiuc.edu/vista/pdf_pubs/200.PDF>. [URL verified 8/13/03].

Munkvold, G. 1996. **Corn Stalk Rot in Iowa** (IPM-50). Iowa State Univ. Coop. Extension Service, Ames, IA. Available online at <http://www.ag.iastate. edu/departments/plantpath/extension/corn_stalk_rot. pdf>. [URL verified 8/13/03].

Stack, J. 1999. **Common Stalk Rot Diseases of Corn** (G99-1385-A). Univ. of Nebraska Coop. Extension Service, Lincoln, NE. Available online at <http://ianrsearch.unl.edu/pubs/plantdisease/g1385.htm>. [URL verified 8/13/03].

Vincelli, P. and D.E. Hershman. **Corn Stalk Rots** (PPA-26). Univ. of Kentucky Coop. Extension Service, Lexington, KY. Available online at <http://www.ca.uky.edu/agc/pubs/ppa/ppa26/ppa26.htm>. [URL verified 8/13/03].

This article contains color photographs and may be viewed at:<http://www.entm.purdue.edu/entomology /ext/targets/p&c/P&C2003/P&C22_2003.pdf>, page 4.

The INDIANA CROP WEATHER REPORT (USPS 675-770), (ISSN 0442-817X) is issued weekly April through November by the Indiana Agricultural Statistics Service, 1435 Win Hentschel Blvd, Suite B105, West Lafayette IN 47906-4145. Second Class postage paid at Lafayette IN. For information on subscribing, send request to above address. POSTMASTER: Send address change to the Indiana Agricultural Statistics Service, 1435 Win Hentschel Blvd, Suite B105, West Lafayette IN 47906-4145.